

IRENE Newsletter

IOWA RESEARCH NETWORK

Volume 3 No. 2 • FALL • WINTER 2009

Our MISSION and PURPOSE

IRENE's mission is to improve the health and well-being of Iowans through collaboration in practice-based research on questions important to primary care physicians and their patients. IRENE's purpose is to create and foster a network of research collaboration between the academic medical center and primary care physicians throughout the state of Iowa with a particular focus on improving rural health.

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National Institutes of Health has awarded Barcey T. Levy, PhD, MD \$404,139 for an American Recovery & Reinvestment Act project

U.S. Department of Health and Human Services, National Institutes of Health, has awarded Barcey T. Levy, PhD, MD \$404,139 for an American Recovery & Reinvestment Act project entitled "Comparative Effectiveness of FIT vs. Colonoscopy for Colon Cancer Screening." RC1 CA144907. The project will be conducted from 09/29/2009 through 08/31/2010.

Summary of the Proposal

With our health care system in financial crisis and colorectal cancer (CRC) being a largely preventable disease, there is a critical need for comparative effectiveness studies of CRC screening modalities in actual clinical practice (challenge topic Comparative Effectiveness Research on Cancer Screening - 05-CA-102). The United States Preventive Services Task Force (USPTF) decision analysis found no advantage for life-years gained by CRC screening using colonoscopy every 10 years vs. annual fecal immunochemical testing in individuals aged 50 to 75. However, no studies have been conducted in the U.S. directly comparing these methods. We plan to compare the test characteristics of a fecal immunochemical test (FIT) with colonoscopy in 700 average-risk individuals undergoing screening colonoscopy, conduct cost-effectiveness analyses assuming annual FIT were applied to the eligible average risk U.S.

population, and lay the groundwork for a multi-site community-based trial using our Iowa Research Network (IRENE), a practice-based research network of over 317 family physicians in 200 practices.



The specific aims of this study are to:

- 1 Assess the test characteristics of a single-sample, one-time FIT kit in individuals at average risk for colon cancer, using colonoscopy as the gold standard.
- 2 Develop and administer a self-administered patient survey to better understand patient decision making for screening strategies of FIT vs. colonoscopy. This survey will assess overall patient attitudes, acceptance, and preferences for screening with FIT (annually for 10 years) vs. colonoscopy (once), as well as specific domains of preference concerning aspects such as test characteristics, ease of test completion, colon preparation time and inconvenience, time needed on the day of the procedure, the need for having a driver, total costs and out-of-pocket costs for each procedure, and expected complication rates from colonoscopy procedures. Finally, patients will be asked to make a choice of strategies for future screening when considering all aspects of the procedures over a 10-year period, indicate how confident they are about their decision, and provide thoughts on the advantages and disadvantages of each strategy.
- 3 Compare the numbers of colonoscopy and FIT tests expected with each of the two screening strategies (to include possible follow-up as needed) of annual FIT vs. one time colonoscopy over a 10-year period, both overall and for four sub-groups: men < 60 years, women < 60 years, men 60 and older, and women 60 and older, assuming one of these strategies were to be adopted by the US population eligible for colorectal cancer screening.



American Cancer Society Colon Cancer Screening Project Update

The purpose of this project is to test office reminder systems of gradually increasing intensity to ensure that the patient is educated about CRC screening and receives a physician recommendation for screening. Patients due for screening within each practice (never screened or lapsed with screening) will be randomized to one of four groups that will receive office reminder system strategies of increasing intensity: 1) Usual care, 2) Physician chart reminder alone, 3) Physician chart reminder + multifaceted mailed patient education, including FOBT cards and returnable CRC screening test preference sheet or 4) Physician chart reminder + multifaceted mailed patient education/ FOBT cards/ preference sheet + a telephone reminder.

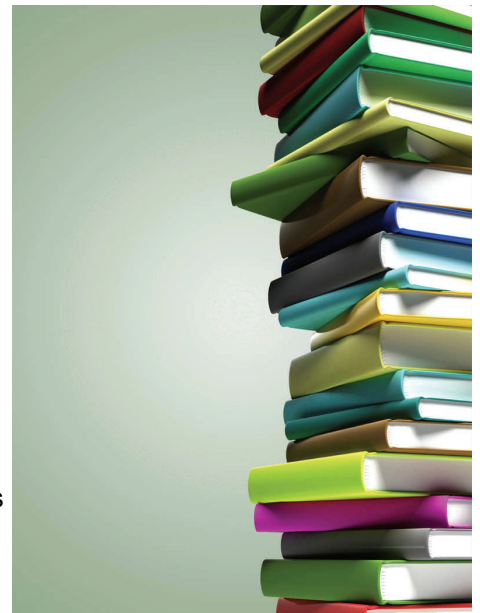


Following is a list of offices/cities and patient recruitment to date:

Office	City	Total Enrolled
Spencer Family Care Avera Health	Spencer	69
Medical Associates	Le Mars	98
Kossuth Regional Health Center	Algona	27
Unity Healthcare	Muscatine	40
Siouxland Medical Education Foundation	Sioux City	24
Sioux Center Medical Clinic	Sioux Center	51
Rebelsky Family Practice LLC	Grinnell	20
Regional Family Health	Manchester	37
Union County Health Foundation	Elk Point	49
Ellsworth Family Medicine	Iowa Falls	30
Medical Associates	Clinton	14
Family Medicine Associates	Guttenberg	54
Dubuque Family Practice, PC	Dubuque	46

Recent IRENE Publications:

- 1) Carter, B. L., Rogers, M., Daly, J., Zheng, S., & James, P. A. (2009). The potency of team-based care interventions for hypertension: A meta-analysis. *Archives of Internal Medicine*, 169(19), 1748-1755.
- 2) Daly, J. M., Hartz, A. J., Xu, Y., Levy, B. T., James, P. A., Merchant, M., & Garrett, R. E. (2009). An assessment of attitudes and behaviors of patients with type 2 diabetes and outcomes. *Journal of the American Board of Family Medicine*, 22(3), 1-8.
- 3) Daly, J. M., Joshi, M., Levy, B. T., & Jogerst, G. J. (2009). Patient clock drawing and accuracy of self-report compared with chart review for colorectal cancer (CRC) Screening. *Archives of Gerontology and Geriatrics*, June 30 [epub ahead of print].
- 4) Daly, J.M., Levy, B.L., & Merchant, M.L. (2009). Colorectal cancer screening guidelines and consumers' concerns with specimen collection. *American Journal of Nursing*, 109(10), 58-60.
- 5) Levy, B. T., Hartz, A., Woodworth, G., Xu, Y., & Sinift, S. (2009). Interventions to improving osteoporosis screening: an Iowa Research Network (IRENE) study. *Journal of the American Board of Family Medicine*, 22(4), 360-7.



If you are interested in receiving a copy of any of the above publications, please email the request to IRENE@uiowa.edu.

THE HEALTHCARE REFORM DEBATE

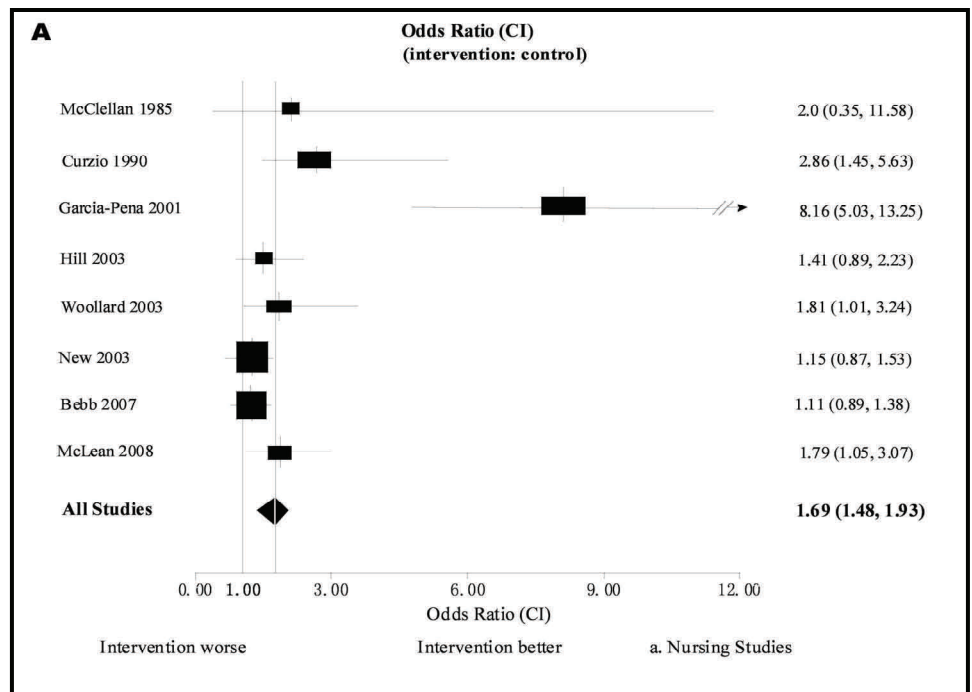
The healthcare reform debate has focused attention on the Medical Home as a critical element to strengthen and sustain a robust primary care delivery system. One key component of the Medical Home is team-based care in which the primary care physician leader delegates care responsibilities to other team members. We now know more about what effective teams in primary care settings can accomplish in managing patients with high blood pressure because of work done by two IRENE researchers at the University of Iowa published in the October 26 issue of *Archives of Internal Medicine*. While there are numerous studies that have examined the collaborative management of chronic diseases by nurses or pharmacists, there is little information on how effective these strategies are or the individual aspects of care delivery that work best. The researchers conducted a systematic search of the literature from 1970 through early 2009 and identified 37 controlled clinical studies of either nurse or pharmacist management of high blood pressure.



Team-based care often includes many components within the intervention. The most effective single components to reduce systolic blood pressure in this new research were when: the pharmacist made a recommendation to the physician to change the medication (-9.30 mm Hg), education was provided about the blood pressure medications (-8.75 mm Hg), the pharmacist performed the intervention (-8.44 mm Hg), a drug profile and medication history were performed (-8.19 mm Hg), medication adherence was assessed (-7.90 mm Hg), counseling about lifestyle modifications was performed (-7.59 mm Hg), the nurse performed the blood pressure management (-4.80 mm Hg), or a treatment algorithm was used (-4.00 mm Hg).

When the investigators pooled the studies, the analyses showed a 1.69 fold increase in the chance that blood pressure would be controlled in studies that involved teams with nurses (Figure A). The odds increased to a 2.17 fold chance when management was assisted by teams that included pharmacists located in the physician's office (Figure B, page 4), and 2.89 fold for studies conducted within community pharmacies (Figure C, page 4).

While it appeared that the most potent strategies to improve blood pressure control involved either pharmacists located in the doctor's office or collaboration with community pharmacists, the authors note that blood pressure management involving nurses was also effective. Including aspects of these interventions in the Medical Home could greatly improve the care of chronic medical conditions such as high blood pressure and should be considered in strategies to reform the delivery of primary care.

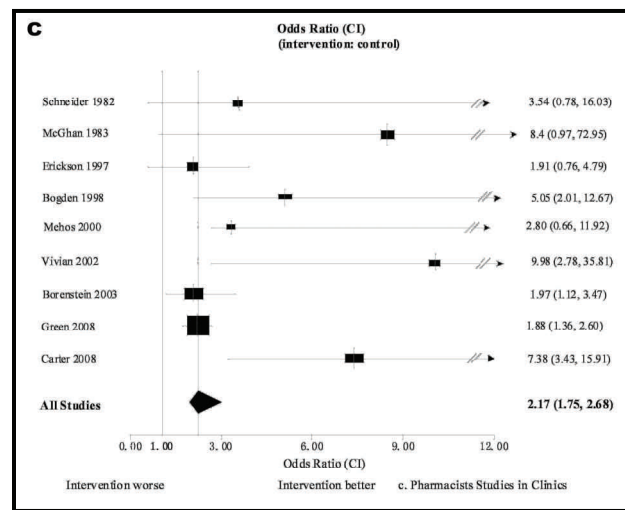
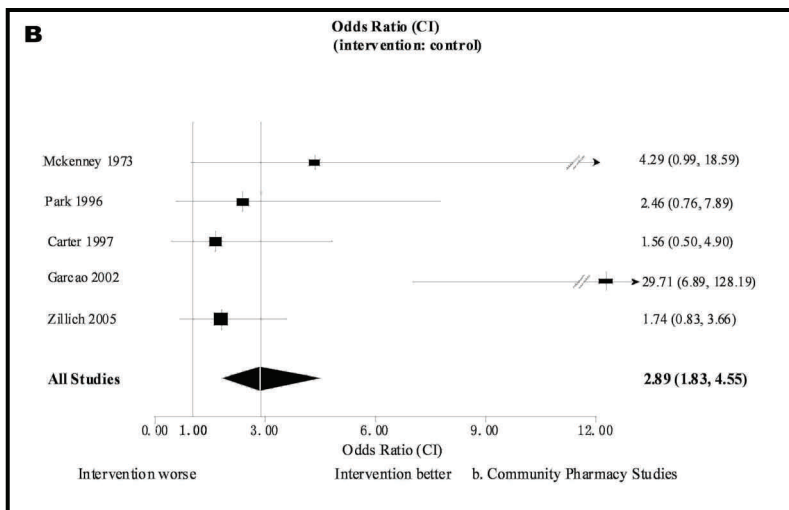


The Odds Ratio (confidence Interval) that systolic BP was controlled in the intervention group compared to the control group.

Figure A: Displays 8 studies involving nurses

Figure B: Displays 5 studies conducted in community pharmacies

Figure C: Displays 9 studies involving pharmacies in primary care clinics



Reference: Carter BL, Rogers M, Daly J, Zheng S, James JA (2009). The potency of team-based care interventions for hypertension: a meta-analysis. *Archives of Internal Medicine*, 169:1748-1755.

Join us at the 37th Annual Refresher Course for the Family Physician

Meet other IRENE Members and encourage
non-IRENE physicians to join

April 6 - 9, 2010 • Marriott Hotel and Conference Center
Coralville, Iowa

IRENE Dinner: Tuesday, April 6, 5:30 - 7:30 PM
Coralville Marriott

Email: irene@uiowa.edu for reservation

INSIDE THIS ISSUE:

National Institutes of Health has awarded Barcey T. Levy, PhD, MD \$404,139 for an American Recovery & Reinvestment Act project	1
American Cancer Society Colon Cancer Screening Project Update	2
Recent Publications	2
The Healthcare Reform Debate	3 - 4



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